

## BIRCH MOUNTAIN RESOURCES LTD.

B	BIRCH MOUNTAIN RESOURCES LTD.
M	300, 250 - SIXTH AVENUE S.W.
D	CALGARY ALBERTA CANADA T2P 3H7
	TEL 403 262 1838 FAX 403 263 9888

## ANNUAL FINANCIAL REPORT

DECEMBER 31, 2004





# MANAGEMENT'S DISCUSSION AND ANALYSIS

## INTRODUCTION

The following management discussion and analysis (MD&A) is current to March 24, 2005 and is management's assessment of the operations and financial results together with future prospects of Birch Mountain Resources Ltd. ("Birch Mountain" or the "Company"), and should be read in conjunction with the Company's audited Consolidated Financial Statements and the Notes to the Consolidated Financial Statements for the year ended December 31, 2004. All amounts are reported in Canadian dollars and in accordance with Canadian Generally Accepted Accounting Principles. The Company has adopted National Instrument 51-102F1 as the guideline in presenting the MD&A.

Birch Mountain is a resource company with divisions in industrial minerals and precious metals. The Company has defined a limestone mineral reserve on our lands in northeastern Alberta held under metallic and industrial mineral leases. This information is based on independent technical reports by AMEC Americas Limited (AMEC), prepared in compliance with Canadian Securities Advisors' National Instrument 43-101, *Standards of Disclosure for Mineral Projects*, and available at [www.sedar.com](http://www.sedar.com) and [www.sec.gov](http://www.sec.gov).

This discussion contains forward-looking statements that involve risk and uncertainties. Such information, although considered reasonable by management at the time of preparation, may prove to be incorrect and actual results may differ materially from those anticipated in the statements made.

## OVERVIEW

Birch Mountain holds metallic and industrial minerals rights over an extensive portion of the Athabasca region north of Fort McMurray, Alberta. Prior to 2002, the Company focused on precious metal exploration and technology development. In 2002, we identified a business opportunity to develop a limestone quarry for aggregate sales and the manufacturing of quicklime, both for use by the growing oil sands industry. As a result, since 2002, we have advanced this limestone business opportunity and deferred funding for precious metal exploration and further technology development. Following recommendations made in an independent technical report prepared by APEX Geoscience Ltd. and filed in May 2003, Birch Mountain intends to continue research and development of the precious metals potential of the Athabasca property when funding is available. Based on independent technical reports prepared by CERI and AMEC, Birch Mountain is satisfied that a market exists for limestone in use by the oil sands companies and regional infrastructure development. For precious metals, however, the Company has no assurance there are commercial concentrations of precious metals on our mineral properties, or that a commercially viable process for precious metal extraction will be developed.

Geological, engineering and economic assessments conducted over the past 24 months have confirmed the significant development opportunity for limestone production on the mineral leases of Birch Mountain and sales of aggregates and quicklime to the growing oil sands industry. The regulatory review process began with the filing of an Environmental Impact Assessment (EIA) and Application for the Muskeg Valley Quarry (MVQ) in March 2004 and approval of the application for aggregate operations at the MVQ is anticipated in mid-2005.

In December 2004, the Company announced the Hammerstone Project ("Hammerstone") consisting of an expanded quarry and quicklime plant. Birch Mountain has largely completed the geological and environmental fieldwork to be used in regulatory filings for the Hammerstone EIA and Application that we expect to file in 3<sup>rd</sup> quarter 2005. Engineering, environmental and regulatory costs to complete and file this application in 2005 are projected to be approximately \$2.4 million. As this is a preliminary estimate, the final cost for regulatory approval of Hammerstone could be much higher as the project is significant and may be referred to a public hearing. If a public hearing is required, then both time and expenses will increase.





To initiate aggregate production from the MVQ, it will be necessary to build a two kilometre access road, clear trees and brush, construct stockpile and working areas and expose the limestone for production. An estimated capital investment of \$800,000 will be required in 2005 to construct the road and prepare the site in order to start production. We plan to use local contractors and their equipment for the first stages of the aggregate operations.

The audited consolidated financial statements provide segmented information to identify expenditures in each of the operating divisions that are outlined below.

### **Industrial Minerals Division**

In 2002, Birch Mountain established an Industrial Minerals Division to take advantage of potential business opportunities arising from our ownership of rights to limestone on our Athabasca mineral leases in northeastern Alberta. Recognizing the opportunity, we completed a geological appraisal of the proposed MVQ and in October 2002, the Company filed the initial public disclosure for the proposed MVQ to supply limestone aggregate to the local market. A shortage of gravel in the Regional Municipality of Wood Buffalo was confirmed in a survey on gravel supply and usage by oil sands leaseholders completed by the Athabasca Regional Issues Working Group (RIWG) and released in February 2003.

In addition, expressions of interest from the oil sands industry in a local supply of quicklime for use in flue gas desulphurization and water treatment led us to evaluate the production of quicklime from limestone in our proposed quarry. Based on the success of early calcining tests in 2002, Birch Mountain conducted further work in 2003 by testing two of the high-calcium carbonate limestone layers (or units) within our quarry. Results of these tests showed that both units are suitable for the production of quicklime.

Using data from environmental and archaeological field studies from 2003 and 2004, we prepared an EIA and Application to the Natural Resources Conservation Board for the development, operation and reclamation of the MVQ. This application encompassed a development of approximately 255 hectares and was filed in March 2004. With respect to quicklime production, the Company undertook further drilling, engineering and environmental field studies in 2004 to gather data for the Hammerstone EIA and Application that is expected to be filed in 3<sup>rd</sup> quarter, 2005.

Total expenditures to December 31, 2004, on the MVQ and Hammerstone projects were \$3,887,025, which included amounts capitalized, and approximately an additional \$850,000 has been invested to date in Q1 2005.

### **Mineral Exploration and Mineral Technology**

With the discovery of metal nanoparticles in rocks from the Company's property in 2000, the focus of our research has been to understand the properties of metals in this form, to develop methods for measuring their concentrations in the rock and to develop extraction and recovery processes. In 2002, we were awarded U.S. patent number 6,494,932 for a process to extract and recover natural nanoparticles. Recognizing the operational and regulatory differences related to disclosure between exploration and research, the Company conducts its work with metal nanoparticles in two divisions, Mineral Exploration and Mineral Technology. Although work in these areas was deferred during 2003 and 2004, as funding becomes available the Company plans to continue precious metals exploration and technology development.

## **SELECTED ANNUAL FINANCIAL INFORMATION**

Birch Mountain has virtually no revenues and our funding has come primarily from private placement financings. The Company has incurred operating losses since inception in 1995, and, as of December 31, 2004, has retained earnings, as adjusted, of \$111,491. Losses are primarily from costs associated with the business of mineral exploration and scientific research plus, in the past two years, the development of the Industrial Minerals Division. Results of operations have fluctuated from period to period and may continue to do so in the future, depending on the timing, amount and type of funding. Additional operating losses are expected in the future as a result of the continued development of the quarry and Hammerstone and investment in exploration and technology. However, the Industrial Minerals Division is expected to start generating income from aggregate sales following the completion of all regulatory requirements for the MVQ in 2005.





<b>Selected Annual Financial Information</b>	<b>2004</b>	<b>2003</b>	<b>2002</b>
Limestone sale	\$ -	\$ 100,000	\$ 250,000
Interest and other income	48,190	211,973	986
G&A expenses	1,872,876	1,136,023	1,170,931
Mineral exploration costs	762,371	744,385	976,305
Future income tax recovery	1,363,000	1,011,000	86,300
Net loss	1,224,057	557,435	1,809,950
Net loss per share, basic and fully diluted	\$ (0.02)	\$ (0.01)	\$ (0.05)
Total assets	\$ 9,532,423	\$ 2,424,233	\$ 265,092
Capitalized mineral exploration costs	3,489,369	336,136	-

In 2004, revenue reported was from interest income on term deposits and in 2002 and 2003 Birch Mountain sold limestone. Interest income in 2004 was from investments of funds raised in private placements during the year. In 2003, the majority of the income was from cancellation of a 1998 accrued debt resulting in a gain of \$194,000.

G&A expenses have risen in 2004 as the Company moves forward with activities necessary for operation, including the filing of the quarry EIA and the payment of professional fees for the independent technical report. G&A expenses increased \$736,853, or 64%, of which 37% of the increase or \$278,358 was related to stock-based compensation expense for options issued to employees and directors.

Mineral exploration costs in 2004 increased by \$2,835,083 to \$3,915,604 (including capitalization of \$3,153,233 of mineral exploration costs) compared with \$1,080,521 (including capitalization of \$336,136 of mineral exploration costs) in 2003 and \$976,305 (including no amounts capitalized) in 2002. In 2003, the Company began capitalizing costs associated with the quarry, as management believes the costs will be recovered from future operations, which is supported by the independent technical reports prepared by AMEC. In 2004 and 2003, all of our exploration costs were focused on the Company's Athabasca limestone industrial mineral properties. In 2002, we directed 99% of exploration expenditures to precious metal prospects in the Athabasca region.

As a result of increased activity and expenditures, the net loss in 2004 increased to \$1,224,057 versus \$557,435 in 2003. In 2004, the Company capitalized \$3,153,223 (2003 - \$336,136) of mineral exploration costs and had a future income tax recovery of \$1,363,000 (2003 - \$1,011,000). Future income tax recovery relates to the taxable benefit associated with the flow-through shares. The loss reported in 2002 was \$1,809,950.

Our primary source of cash has been private placement financings. In 2004, Birch Mountain successfully raised more than \$9.4 million (2003 -\$4.5 million), ending the year with working capital of \$5,281,050 and total assets of \$9,532,423 compared with working capital of \$1,780,829 in 2003 and working capital deficit of \$832,191 in 2002.

Neither Birch Mountain nor our predecessor company has ever declared or paid dividends on our common shares.

Preparation of the financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, to disclose contingent assets and liabilities at the date of the financial statements and to report amounts of revenues and expenses during the reporting period. Significant areas requiring the use of management estimates relate to the deferral and valuation of exploration expenditures. Actual results could differ from the estimates.

## **SUMMARY OF QUARTERLY RESULTS**

The Company's average total expenditures (including expenditures capitalized) per month increased 160% in 2004 to \$482,000 compared \$185,000 in 2003. Mineral exploration costs (including expenditures capitalized) increased to \$326,000 per month in 2004 compared to \$95,000 per month in 2003 and general and administrative expenditures increased to \$156,000 compared to \$100,000 per month in 2003. The increased expenditures related to the regulatory applications for the quarry and Hammerstone, the CERI and AMEC independent technical reports, additional shareholder and promotion costs and an increase in stock-based compensation.





Quarterly Results	2004				2003			
Three months ended	Dec 31	Sept 30	Jun 30	Mar 31	Dec 31	Sept 30	Jun 30	Mar 31
Interest and other income	\$ 24,799	\$ 14,102	\$ 1,540	\$ 7,749	\$ 110,513	\$ 97	\$ 201,360	\$ 2
G&A expenses	614,958	472,059	418,825	367,034	387,865	242,503	275,305	230,350
Mineral exploration costs	79,287	124,107	258,663	300,314	80,755	264,168	134,801	264,661
Future income taxes	1,363,000	-	-	-	1,011,000	-	-	-
Net earnings (loss) for the period	693,550	(582,064)	(675,948)	(659,599)	441,893	(506,574)	(21,745)	(471,009)
Net earnings (loss) per share - basic and fully diluted	0.01	(0.01)	(0.01)	(0.01)	0.01	(0.01)	0.00	(0.01)
Total assets	\$9,532,423	\$7,417,076	\$1,991,375	\$2,635,649	\$2,424,233	\$ 227,539	\$ 356,181	\$ 232,719
Mineral properties	\$3,489,369	\$2,598,045	\$1,502,987	\$1,151,322	336,136	-	-	-

## Major Events in 2004

### Fourth Quarter 2004

- In December 2004, the Company completed a private placement of 188,886 units at \$0.60 per unit for gross proceeds of \$113,331.60. Each unit consisted of one common share and one common share warrant, entitling the holder to purchase one additional common share at a price of \$0.75 before December 31, 2005.
- In December 2004, the Company completed a private placement of 732,263 units at \$1.50 per unit for gross proceeds of \$1,098,394.50. Of these units 142,896 units were flow-through and the remaining 589,367 consisted of one common share and one common share warrant, entitling the holder to purchase one additional common share at a price of \$2.00 before December 31, 2005.
- Announced that the EIA for the quarry filed in March 2004 has been declared complete by Alberta Environment and the publishing of a 35-day period of Public Notice of Application by the NRCB.
- Filed a Public Disclosure Document and Proposed Terms of Reference for the EIA for Hammerstone with the NRCB and Alberta Environment which will expand the Company's limestone quarry and open a quicklime plant on our leases in the Fort McMurray area.
- Applied to list the Company's common shares on the American Stock Exchange.
- Recorded a future income tax recovery, which decreased the total net loss for 2004, resulting in \$693,550 net earnings for the fourth quarter.
- Renounced flow-through expenditures of \$3.7 million on flow-through shares issued in 2003 and 2004.
- Applied to the Alberta Department of Energy to obtain nine new metallic and industrial minerals exploration permits; these were granted in Q1 2005.

### Third Quarter 2004

- In July and August 2004, the Company completed a private placement of a total of 8,996,093 units at \$0.60 per unit were issued for gross proceeds of \$5,397,655.80. Of these units 5,883,333 units were flow-through and the remaining 3,112,760 consisted of one common share and one-half of one common share warrant, each whole share warrant entitling the purchase of one common share at a price of \$0.75 before December 31, 2005. The agent received 666,667 warrants, each warrant entitling the purchase of one common share at a price of \$0.75 before December 31, 2005.
- Granted 1,150,000 stock options to directors and officers of the Corporation with an exercise price of \$0.55, expiring on August 27, 2009.
- Received an independent report by the Canadian Energy Research Institute summarizing their study of the long-term demand for aggregates and quicklime by the oil sands industry.
- Applied to the Alberta Department of Energy to obtain 15 new metallic and industrial minerals exploration permits; these were granted in Q4 2005.
- Filed an Assessment Report with the Alberta Department of Energy to maintain seven metallic and industrial minerals permits acquired in 1996 and 1998 in good standing until 2006; the report has not yet been approved.
- Allowed ten metallic and industrial minerals permits in the Birch Mountains area to expire.





#### **Second Quarter 2004**

- Completed a drill program on the Company's leases in Fort McMurray to confirm the calcinable and aggregate quality of the limestone.
- Hired a financial public relations firm in the United States to provide further introductions in the U.S. investment community.
- Applied to the Alberta Department of Energy to convert portions or all of 16 mineral permits into twenty-six leases in the Athabasca region covering an area of 58,082 hectares; these have not yet been granted. Allowed one metallic and industrial minerals permit to expire.
- Appointed Derrick Kershaw to the Board of Directors.
- Restated the Company's accumulated deficit and share capital as of June 30, 2004. Pursuant to Section 38 of the Business Corporations Act of Alberta, the capital account for common shares and the deficit were reduced by \$27,748,931.

#### **First Quarter 2004**

- Filed an application with the NRCB and Alberta Environment for regulatory approval to construct, operate and reclaim the MVQ.
- Completed the winter 2004 drill program on the Company's leases in the Hammerstone project areas.
- Announced the results of an independent technical report conforming to National Instrument 43-101 *Standards of Disclosure for Mineral Projects*, which provides a preliminary assessment of the Company's limestone project in Fort McMurray and supports the potential for the project to be developed into a major producer of aggregate and quicklime in the Fort McMurray region supporting the oil sands industry.
- Applied to the Alberta Department of Energy to convert portions or all 14 mineral permits in the Athabasca region into thirty-three leases covering an area of 75,472 hectares; these were granted in Q2 2005. Allowed one metallic and industrial minerals permit to expire.

#### **Major Events in 2003**

##### **Fourth Quarter 2003**

- Sold \$100,000 of limestone to Syncrude Canada Ltd.
- Incurred a 60% increase in G&A expenditures compared with Q3 2004 and 38% compared with Q3 2003 largely due to the Company's adoption of stock-based compensation accounting policy, which resulted in an expense of \$66,681.
- Capitalized the industrial mineral costs and recorded a future income tax recovery, which decreased mineral exploration cost and the total net loss for 2004, resulting in \$441,839 net earnings for the fourth quarter.
- Completed a private placement of 4,000,000 flow-through units at a price of \$0.50 per unit.
- Renounced flow-through expenditures of \$2.5 million.
- Applied to the Alberta Department of Energy to convert portions of one metallic and industrial minerals permit to lease; this was granted in Q1 2005.
- Applied to Alberta Department of Energy to transfer the limestone rights in one metallic and industrial minerals lease to Birch Mountain Resources; this was finalized in Q1 2005.

##### **Second and Third Quarters 2003**

- Conducted environmental and archaeological field studies and used the data to prepare an EIA and an Application to the NRCB.
- Incurred an increase in G&A expenses because of financing activities.
- Applied to the Alberta Department of Energy to convert portions of one metallic and industrial minerals permit to lease; this was granted in Q4 2004.

##### **First Quarter 2003**

- Completed a drilling program in the proposed limestone quarry and tested two high-calcium limestone units.
- Completed a private placement of 465,712 units at \$0.25 per unit in January. Of these, 248,000 units were flow-through. All units consisted of one common share plus one non-transferable common share purchase warrant entitling the holder to purchase an additional common share for \$0.50 for a period of 18 months after closing.





## RESULTS OF OPERATIONS

The Company incurred a net loss of \$1,224,057 in the year ended December 31, 2004 (2003—\$557,435; 2002—\$1,809,950) and as at December 31, 2004, had retained earnings, as restated, of \$111,491.

### Corporate Income

Income in 2004 is derived from interest income. We sold \$100,000 of limestone to Syncrude Canada Ltd. in 2003 and \$250,000 to Suncor Energy Ltd. in 2002. Birch Mountain and subsidiaries have limited income from production because the Industrial Minerals Division is in development, all other properties remain at the exploration stage, and our technology is still under development. The Company's ability to generate income requires the opening of the MVQ and successful sale of aggregates and this is the Company's focus in 2005. Alternatively, the Company could generate income by selling our land lease and permit interests on an advantageous basis.

### Corporate Expenses

Total costs in 2004 were \$1,872,876 (excluding \$762,371 of mineral exploration costs), and in 2003 were \$1,136,023 (excluding \$755,535 of mineral exploration and industrial mineral costs), and in 2002 were \$1,170,931 (excluding \$976,305 of mineral exploration costs). The Company adopted the stock-based compensation and other stock-based payment accounting standard of the Canadian Institute of Chartered Accountants Handbook Section 3870 in 2003. The impact of the adoption of this standard for the year ended December 31, 2004, was additional compensation expense of \$246,127 and additional professional fees of \$32,231. For the year ended December 31, 2003, the impact was an additional compensation expense of \$66,681 and additional mineral exploration costs of \$1,231.

G&A expenditures, excluding stock-based compensation, increased slightly in 2004 to \$1,594,518 compared with 2003 of \$1,069,342 and 2002 of \$1,170,931. The increase in 2004 reflects the increased focus on the industrial mineral potential of the Athabasca leases and the necessary regulatory costs necessary to move the MVQ and Hammerstone towards production.

### Mineral Exploration Costs

The Company incurs mineral exploration costs in our three divisions. In 2004, the Company spent a total of \$3,915,604, of which \$3,153,233 was capitalized.

Total Mineral Exploration Costs	2004	2003	2002
Industrial Minerals	\$ 3,153,233	\$ 807,327	\$ 112,460
Mineral Exploration	762,371	262,044	821,331
Mineral Technology	-	11,150	42,514
	3,915,604	1,080,521	976,305
Amounts Capitalized	3,153,233	336,136	-
Mineral Exploration Expenses	\$ 762,371	\$ 744,385	\$ 976,305

### Industrial Minerals Costs

The Company continues to focus on our Industrial Minerals Division, which was established in 2002. In 2004, we focused most of our financial resources on a further geological evaluation of the quarry and environmental approvals. In 2004, \$3,153,233 was spent with this entire amount being capitalized, compared to 2003 where \$807,327 was spent with \$336,136 of this amount being capitalized. In 2002, this division spent \$112,460, with no amounts capitalized. Birch Mountain will continue to invest in our limestone quarry project.

### Mineral Exploration Costs

Mineral exploration costs related to precious metals increased in 2004 to \$762,371 from \$262,044 in 2003 and \$821,331 in 2002. This work was focused on the Company's Athabasca mineral properties.

### Mineral Technology Costs

With the Company's dedicated focus on industrial minerals in 2004, spending on scientific research directed to developing proprietary extraction and analytical techniques for precious metals decreased to zero from \$11,150 in 2003 and \$42,514 in 2002. The results of our previous research led to the filing of a U.S. and international patent application in the spring of 2000. Birch Mountain was granted a U.S. patent in December 2002.





## LIQUIDITY AND CAPITAL RESOURCES

The Company's primary source of cash has been private placements. Working capital at December 31, 2004 was \$5,281,050, a significant improvement from 2003 at \$1,780,829 and 2002 at negative \$832,191.

During 2004, Birch Mountain successfully raised gross proceeds of \$6.6 million through private placements versus \$4.5 million in 2003 and \$926,705 in 2002. Birch Mountain received \$228,580 from the exercise of stock options in 2004, \$65,000 in 2003 and during 2002 no options were exercised. Birch Mountain also received \$2.7 million from the exercise of warrants in 2004, and no warrants were exercised in 2003 or 2002. The funds raised in 2004 provided working capital to sustain basic operations well into 2005. Project-specific financing may be available to advance the limestone/quicklime project in 2005 and beyond.

At expenditure rates consistent with the fourth quarter of 2004, the Company has existing capital to continue operations into the fourth quarter of 2005. G&A expenditures in 2004 increased to approximately \$156,000 per month from approximately \$100,000 in 2003 and 2002 as the corporate infrastructure was built to move the Company into operations with quarry production expected by mid-year 2005. We are assessing strategic options and opportunities for additional financing to fund the start-up of the MVQ for the production and sale of various aggregates, to advance the regulatory approval of a Hammerstone project, including the quicklime plant, to restart research and precious metal assay program development and to continue ongoing corporate activities. To the extent the Company raises additional capital by issuing equity or convertible debt securities, ownership dilution to shareholders will result, but not necessarily a dilution in value. At December 31, 2004, the Company had renounced flow-through expenditures of \$3.7 million, spent qualifying expenditures on 2003 commitments of \$1.9 million and has a further requirement to spend \$2,545,000 of qualifying expenditures for work associated with the quarry and Hammerstone prior to December 31, 2005.

On-going commitments for capital resources relate largely to the maintenance of the mineral permits and leases granted to the Company by the Government of Alberta plus some general operating leases. The total landholdings of the Company decreased by 34,513 hectares in 2004. Lease and permit payments, along with associated fees in 2004 were \$659,177, while lease and permit payments and commitments beyond 2004 will be approximately \$655,235 if we continue to hold all of our mineral leases into the future. Following further exploration, we may choose to reduce our landholdings, which will reduce our capital commitments for maintaining the mineral leases in good standing.

Total Landholdings under Mineral Leases and Permits at December 31		2004		2003		2002	
Project		Hectares	Acres	Hectares	Acres	Hectares	Acres
Athabasca		335,190	828,269	277,543	685,821	326,332	806,382
Birch Mountains		-	-	92,160	227,731	92,160	227,731
Total		335,190	828,269	369,703	913,552	418,492	1,034,113

At March 21, 2005, the Company holds mineral leases, mineral permits and mineral permits, which applications have been filed for conversion to leases, in the Athabasca region, covering an area of 402,965 hectares (995,744 acres).

## RISKS AND UNCERTAINTIES

### Capital

Birch Mountain is a developing company with insufficient revenue to meet our yearly operating and capital requirements. The Company has successfully raised funds necessary to explore our leases and permits, prepare for and plan operations and to conduct our corporate affairs primarily through private placements of common stock. There is no guarantee the Company will be able to continue to raise funds or to successfully partner with a company that has the necessary capital. In the past, Birch Mountain has financed the business by raising funds in the equity markets. As required in the future or as advantageous to the Company, financing may be available through joint venture or partnering agreements, through additional private placements or by obtaining project debt financing. Although these are alternatives the Company will investigate, there is no assurance that the Company will be successful.





### **Mineral Property Development**

Based on exploration results to date and the independent prefeasibility report prepared by AMEC, Birch Mountain believes development of our mineral properties will yield economically recoverable limestone. The ability of Birch Mountain to obtain necessary environmental operating approvals, to secure adequate operating and capital financing, to successfully put the property into production and to operate profitably in the future are uncertain.

### **Customer Dependency**

In the Industrial Minerals Division and with the development of the quarry, Birch is dependant on customers located geographically near the operating limestone quarry. Costs of transportation of aggregate are high relative to its cost of production and tend to be prohibitive to customers who might ship the product over longer distances. As a result, Birch plans to market our products to the oil sands industry in Fort McMurray. Should the price of oil decline, there is no guarantee oil sands companies will continue to require the Company's products.

### **Regulatory and Environmental**

The Company operates in areas that are subject to governmental provisions regulating exploration and development of mineral resources. Birch Mountain may be constrained or forbidden to develop a quarry or mine in areas of economic mineral deposits or mandated operating guidelines may adversely the economic viability of the projects. Additionally, the Company holds metallic and industrial mineral permits and leases issued by the Government of Alberta and there are no guarantees the Government will continue to extend land rights under its current practices.

Birch Mountain is required by regulation to operate under certain environmental guidelines that are mandated by federal and provincial governments in Canada. Additionally, public expectation of industry's environmental performance remains high and interventions by environmental groups could impact the Company's ability to operate. Birch has established environmental policies that it believes will allow it to operate effectively under the environmental guidelines. Birch has and will continue to work with the local communities to address public environmental concerns.

### **Personnel**

The Company employs twelve employees and relies on part time workers, contractors and consultants to assist in executing operations and providing technical guidance. As the Company moves into operations it will be necessary to rely on workers in the local area. In Northern Alberta, skilled labour shortages are common. There is uncertainty surrounding the ability to retain and attract personnel to the project and should the Company not have adequate personnel, the project may not become operational or may not be economically viable.

### **Alternate Technologies**

The use of limestone for aggregates and the use of quicklime as a product for desulphurization of air emissions and water treatment could be replaced by alternate technologies as the oil sands industry looks at more cost effective and efficient methods. The rate of development of new technologies or the impact on our business cannot be determined.

## **OFF-BALANCE SHEET ARRANGEMENTS**

The Company has no off-balance sheet arrangements.

## **RELATED-PARTY TRANSACTIONS**

The Company had the following transactions with related parties:

- Included in shareholder services and promotion are amounts of \$14,656 (2003–\$1,469; 2002–\$9,888) paid to a company controlled by the spouse of a director.
- Included in professional fees is \$37,159 (2003–\$26,327; 2002–46,614) of consulting and legal fees paid to a company owned by an officer;
- Included in professional fees is \$99,145 (2003–\$77,254, 2002–\$61,664) of legal fees paid to firms in which officers are partners; and
- Included in accounts payable is \$7,945 (2003–\$24,953; 2002–\$68,763) relating to these transactions.

These transactions were in the normal course of operations and were measured at the exchange amount, which is the amount of consideration established and agreed to by the related parties.





## CHANGES IN ACCOUNTING POLICIES INCLUDING INITIAL ADOPTION

There were no changes in accounting policies during the year ended December 31, 2004.

## FINANCIAL INSTRUMENTS

The carrying amount of cash, accounts receivable and accounts payable approximates their fair value because of the short-term maturities of these items. The Company enters into transactions to purchase goods and services denominated in United States currency for which the related expenses and accounts payable balances are subject to exchange rate fluctuations. The transactions and balances have been stated in Canadian dollars in accordance with our foreign currency translation policy.

## ADDITIONAL DISCLOSURE FOR VENTURE ISSUERS WITHOUT SIGNIFICANT REVENUE

<b>Additional Disclosure for Venture Issuers without Significant Revenue</b>	<b>2004</b>	<b>2003</b>	<b>2002</b>
Mineral exploration			
Capitalized mineral exploration expenses	\$ 3,153,233	\$ 336,136	\$ —
Expensed mineral costs	762,371	744,385	976,305
Expensed R&D costs	-	11,150	42,514
Corporate expenses	1,872,876	1,124,873	1,128,417
Total assets	9,532,423	2,424,233	265,092

  

	<b>2004</b>	<b>2004</b>	<b>2003</b>	<b>2003</b>	<b>2002</b>
<b>Mineral Costs</b>	<b>Capitalized</b>	<b>Expensed</b>	<b>Capitalized</b>	<b>Expensed</b>	<b>Expensed</b>
Administration	\$ 73,910	\$ 34,276	\$ 5,473	\$ 65,796	\$ 66,941
Assay and geological	77,740	654	—	20,429	9,138
Land lease and permit	47,320	611,857	3,210	146,327	117,778
Materials, services and drilling	2,393,912	45,737	212,325	179,060	345,553
Salaries	479,089	66,708	105,166	315,925	421,419
Travel and accommodations	81,262	3,319	9,962	16,847	15,476
	\$ 3,153,233	\$ 762,371	\$ 336,136	\$ 744,385	\$ 976,305

  

<b>Corporate Expenses</b>	<b>2004</b>	<b>2003</b>	<b>2002</b>
Amortization	\$ 50,336	\$ 33,632	\$ 47,558
Consulting	79,973	800	2,400
Office	383,316	263,247	233,043
Professional fees	396,552	125,175	264,584
Salaries and benefits	386,579	422,135	437,786
Shareholders services and promotion	329,993	213,203	143,046
Stock based compensation	246,127	66,681	—
	\$ 1,872,876	\$ 1,124,873	\$ 1,128,417

  

<b>Outstanding Share Data at March 24, 2005</b>	<b>Number</b>
Issued and outstanding common shares	67,257,417
Outstanding options to purchase common shares	8,730,485
Outstanding warrants to purchase common shares	2,410,155
Fully diluted common shares	78,398,057





# BIRCH MOUNTAIN RESOURCES LTD.

Consolidated Financial Statements  
December 31, 2004 and 2003



# MANAGEMENT'S RESPONSIBILITY FOR FINANCIAL REPORTING

## TO THE SHAREHOLDERS OF BIRCH MOUNTAIN RESOURCES LTD.

Management has the responsibility for preparing the accompanying financial statements. This responsibility includes selecting appropriate accounting principles and making objective judgments and estimates in accordance with Canadian generally accepted accounting principles and providing a reconciliation to generally accepted accounting principles in the United States.

In discharging its responsibilities for the integrity and fairness of the financial statements, management designs and maintains the necessary accounting systems and related internal controls to provide reasonable assurance that transactions are authorized, assets safeguarded and proper records maintained.

It is the responsibility of the Audit Committee and Board of Directors to review the financial statements in detail with management prior to their approval of the financial statements for publication.

External auditors are appointed by the shareholders to audit the financial statements and report directly to them. Their report is attached to the audited consolidated financial statements that follow. The external auditors have full and free access to the Audit Committee, the Board of Directors and management.

*"signed"*

---

Douglas J. Rowe, President and Chief Executive Officer

*"signed"*

---

Hansine M. Ullberg, Vice President Finance and Chief Financial Officer





**Birch Mountain Resources Ltd.**  
**Report of Independent Registered Public Accounting Firm**

---

To the Shareholders of  
**Birch Mountain Resources Ltd.**

We have audited the consolidated balance sheets of **Birch Mountain Resources Ltd.** as at December 31, 2004 and 2003 and the consolidated statements of loss and retained earnings (deficit) and cash flows for each of the years in the three-year period ended December 31, 2004. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with Canadian generally accepted auditing standards and the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these consolidated financial statements present fairly, in all material respects, the financial position of the Company as at December 31, 2004 and 2003 and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2004, in accordance with Canadian generally accepted accounting principles.

Calgary, Canada  
February 25, 2005

“Signed”  
*Myers Norris Penny LLP*  
Chartered Accountants





**Birch Mountain Resources Ltd.**  
**Consolidated Balance Sheets**  
As at December 31

	2004	2003
<b>Assets</b>		
<b>Current</b>		
Cash and cash equivalents	5,444,270	1,818,292
GST and other receivables	233,459	52,221
Prepays and deposits	184,108	59,102
	5,861,837	1,929,615
<b>Property, plant and equipment</b> (Note 3)	181,217	158,482
<b>Mineral properties</b> (Note 4)	3,489,369	336,136
<b>Total Assets</b>	9,532,423	2,424,233
<b>Liabilities</b>		
<b>Current</b>		
Accounts payable and accrued liabilities (Note 5)	357,229	91,598
Advances on share subscriptions	173,252	-
Other liabilities (Note 6)	50,306	57,188
	580,787	148,786
<b>Shareholders' equity</b>		
<b>Share capital</b> (Note 7)	8,501,576	28,598,874
<b>Contributed surplus</b> (Note 9)	338,569	89,957
<b>Retained earnings (deficit)</b> (Note 10)	111,491	(26,413,384)
	8,951,636	2,275,447
<b>Total Liabilities and Shareholders' Equity</b>	9,532,423	2,424,233
Nature of operations (Note 1)		
Commitments (Note 11)		

Approved on behalf of the Board:

"signed"

\_\_\_\_\_  
Director

Douglas J. Rowe

"signed"

\_\_\_\_\_  
Director

Kerry E. Sully

The accompanying notes are an integral part of these financial statements.





**Birch Mountain Resources Ltd.**  
**Consolidated Statements of Loss and Retained Earnings (Deficit)**  
For the years ended December 31

	2004	2003	2002
<b>Expenses</b>			
Mineral properties expensed <i>(Note 4)</i>	762,371	744,385	976,305
Salaries and benefits	386,579	422,135	437,786
Office	383,316	263,247	233,043
Professional fees	396,552	125,175	264,584
Shareholder services and promotion	329,993	213,203	143,046
Stock-based compensation <i>(Note 8)</i>	246,127	66,681	-
Consulting	79,973	800	2,400
Amortization	50,336	33,632	47,558
Research costs	-	11,150	42,514
<b>Loss before the following</b>	<b>2,635,247</b>	<b>1,880,408</b>	<b>2,147,236</b>
Interest and other income	(48,190)	(11,205)	(986)
Gain on disposal of investment	-	(6,768)	-
Limestone sale	-	(100,000)	(250,000)
Gain on cancellation of debt <i>(Note 5)</i>	-	(194,000)	-
	<b>(48,190)</b>	<b>(311,973)</b>	<b>(250,986)</b>
<b>Loss before income taxes</b>	<b>2,587,057</b>	<b>1,568,435</b>	<b>1,896,250</b>
Future income tax recovery <i>(Note 13)</i>	(1,363,000)	(1,011,000)	(86,300)
<b>Net loss for year</b>	<b>1,224,057</b>	<b>557,435</b>	<b>1,809,950</b>
<b>Deficit, beginning of year, as previously stated</b>	<b>(26,413,384)</b>	<b>(25,855,949)</b>	<b>(24,045,999)</b>
<b>Elimination of deficit <i>(Note 10)</i></b>	<b>27,748,932</b>	<b>-</b>	<b>-</b>
<b>Retained earnings (deficit), end of year</b>	<b>111,491</b>	<b>(26,413,384)</b>	<b>(25,855,949)</b>
<b>Loss per share</b>			
Basic and diluted <i>(Note 14)</i>	<b>(0.02)</b>	<b>(0.01)</b>	<b>(0.05)</b>

The accompanying notes are an integral part of these financial statements.



**Birch Mountain Resources Ltd.**  
**Consolidated Statements of Cash Flows**  
For the years ended December 31

	2004	2003	2002
<b>Cash flows from operating activities</b>			
Cash paid to suppliers	(1,321,259)	(1,491,817)	(637,952)
Cash paid to employees	(878,063)	(921,277)	(782,086)
Interest paid	(3,900)	(45,921)	(22,218)
Interest income received	47,549	2,358	714
Cash received from customers	-	-	269,004
	(2,155,673)	(2,456,657)	(1,172,538)
<b>Cash flows from financing activities</b>			
Issuance of common shares for cash	9,381,086	4,623,601	911,705
Advances on share subscriptions	173,252	-	-
Share issuance costs	(546,383)	(163,590)	-
	9,007,955	4,460,011	911,705
<b>Cash flows from investing activities</b>			
Mineral exploration costs	(3,153,233)	(230,970)	-
Purchase of capital assets	(73,071)	(29,442)	(99)
Proceeds on disposal of investment	-	26,768	-
Proceeds on disposal of capital assets	-	800	18,000
	(3,226,304)	(232,844)	17,901
<b>Increase (decrease) in cash</b>	<b>3,625,978</b>	<b>1,770,510</b>	<b>(242,932)</b>
<b>Cash at beginning of year</b>	<b>1,818,292</b>	<b>47,782</b>	<b>290,714</b>
<b>Cash at end of year</b>	<b>5,444,270</b>	<b>1,818,292</b>	<b>47,782</b>

*The accompanying notes are an integral part of these financial statements.*





## 1. Nature of operations

Birch Mountain Resources Ltd. (the "Company"), incorporated under the jurisdiction of the Business Corporations Act of Alberta, is exploring and preparing to develop its mineral leases and permits in Northern Alberta. The recoverability of the amounts shown for mineral properties is dependant upon the existence of economically recoverable reserves, securing and maintaining title and beneficial interest in the properties, and the ability of the Company to obtain the necessary financing or cash flow to continue the exploration and future development of its mineral properties. On February 25, 2005, the Company released an independent technical report, which indicates the potential for a limestone quarry in the Fort McMurray area and reports an estimated value for the mineral reserves in excess of the current carrying value of the mineral properties.

These financial statements have been prepared by management in accordance with Canadian generally accepted accounting principles on a going-concern basis. This presumes funds will be available to finance ongoing exploration, operations and capital expenditures and permit the realization of assets and the payment of liabilities in the normal course of operations for the foreseeable future.

The Company is obligated to incur certain levels of expenditures to maintain its rights to continue exploration of certain mineral leases and permits. The Company's success is dependent on obtaining sufficient funds to carry out development activities on its mineral leases, preserving its interest in the underlying minerals, achieving future profitable production or, alternatively, on the Company's ability to dispose of its interests on an advantageous basis.

## 2. Significant accounting policies

### (a) Principles of consolidation

The consolidated financial statements are expressed in Canadian dollars and are prepared in accordance with Canadian generally accepted accounting principles. These financial statements include the accounts of the Company and its wholly owned subsidiaries, Dawson Bay Minerals Inc., and Rockyview Development Limited and its subsidiaries. Rockyview Development Limited and its subsidiaries have been inactive since 1998. Dawson Bay Minerals Inc. has been inactive throughout 2004. All intercompany balances and transactions have been eliminated.

### (b) Use of estimates

The preparation of the consolidated financial statements in conformity with Canadian generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amount of assets and liabilities and disclosure of contingent liabilities as at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results may differ from those reported. Significant areas requiring the use of management estimates include estimates related to the determination of impairment of mineral exploration costs, reclamation obligations and determination of qualifying renunciations and the assumptions used in calculating stock option compensation expense. These estimates are reviewed periodically and, as adjustments become necessary, they are reported in earnings in the periods in which they become known.

### (c) Cash and cash equivalents

Cash and cash equivalents include balances with Canadian chartered banks and investment certificates with maturities of three months or less.

### (d) Property, plant and equipment

Capital assets are recorded at cost. Amortization is provided over their estimated useful lives, using the following methods and rates:

	Method	Annual Rate
Equipment	Declining balance	20% - 30%
Computer	Declining balance	30% - 100%
Leasehold improvements	Straight line	5 years





**2. Significant accounting policies (continued)**

**(e) Mineral properties**

The Company expenses mineral exploration costs, unless on a property-by-property basis the deferral criteria are met and it is probable that they will be recoverable from the future operations of the related project. During 2003, the Company began capitalizing expenditures related to the exploration and testing of a limestone property, as management is of the opinion that it is probable these costs will be recovered from future operations. When the carrying value of a property exceeds its net recoverable amount (net recoverable amounts are estimated by quantifiable evidence of an economic geological resource or reserve, joint venture expenditure commitment or the Company's assessment of a property's realizable value) or if leases and permits are sold, allowed to lapse or abandoned, a provision is made for the impairment based on undiscounted estimated future net cashflows.

Management's estimates of mineral prices, recoverable proven and probable reserves and operating and capital costs are subject to certain risks and uncertainties, which may affect the recoverability of mineral property costs. Although management has made its best estimate of these factors, it is possible that changes could occur in the near term, which could adversely affect the future net cash flows to be generated from the properties or the financial position of the Company.

**(f) Long-lived assets**

Long-lived assets consist of property, plant and equipment and mineral properties. Long-lived assets held for use are measured and amortized as described in the applicable accounting policies.

The Company performs impairment testing on long-lived assets held for use whenever events or changes in circumstances indicate that the carrying value of an asset, or group of assets, may not be recoverable. Impairment losses are recognized when undiscounted future cash flows from its use and disposal are less than the assets' carrying amount. Impairment is measured as the amount by which the assets' carrying value exceeds its fair value. Any impairment is included in loss for the year.

**(g) Asset retirement obligation**

The Company has adopted the new recommendations of the CICA relating to accounting for asset retirement obligations. This recommendation replaces the previous method of accounting for site restoration costs on an accrual basis. The Company has adopted the new standard on a retroactive basis in accordance with the CICA recommendations on Accounting Changes. Under the new standard, a liability for the fair value of environmental and site restoration obligations are recorded when the obligations are incurred and the fair value can be reasonably estimated. The obligations are normally incurred at the time the related assets are brought into production. The fair value of the obligations is based on the estimated cash flow required to settle the obligations discounted using the Government of Canada Bond Rate for the applicable term adjusted for the Company's credit rating. The fair value of the obligation is recorded as a liability with the same amount recorded as an increase in capitalized costs. The amounts included in capitalized costs are depleted using the unit-of-production method. The liability is adjusted for accretion expense representing the increase in the fair value of the obligations due to the passage of time. The accretion expense is recorded as an operating expense. There is no impact on the current year's financial statements, as production has not yet occurred.

**(h) Flow-through shares**

Under Canadian income tax legislation, corporations are permitted to issue shares whereby the Company agrees to incur qualifying expenditures, as defined under the Canadian Income Tax Act, and renounce the related income tax deductions to the investors. The tax benefits renounced are reflected as a future tax liability and deducted from the proceeds of share capital.

**(i) Research costs**

The Company was actively engaged in researching new mineral technology applications. Costs associated with such projects, including patent application costs, are expensed in the period they are incurred.



**2. Significant accounting policies (continued)**

**(j) Future income taxes**

The Company follows the asset and liability method of accounting for income taxes. Under this method, future income tax assets and liabilities are recorded based on temporary differences between the carrying amount of balance sheet items and their corresponding tax bases. In addition, the future benefits of income tax assets, including unused tax losses, are recognized, subject to a valuation allowance, to the extent that it is more likely than not that such future benefits will ultimately be realized. Future income tax assets and liabilities are measured using enacted tax rates and laws expected to apply when the tax liabilities or assets are to be either settled or realized. At the end of each year, future tax assets and future tax liabilities are reassessed, and any changes in the settlement value are reflected in the current year's income.

**(k) Stock-based compensation and contributed surplus**

Effective January 1, 2003, the Company prospectively adopted the new recommendations of the Canadian Institute of Chartered Accountant's ("CICA") *Handbook 3870 Stock-based Compensation and Other Stock-based Payments*, which requires the fair-value method of accounting for stock-based payments. Under the prospective adoption, compensation expense is recognized for stock options granted, modified or settled after January 1, 2003 based upon the fair value of the options at the grant date. The fair value of the options is recognized over the vesting period of the options as compensation expenses and contributed surplus. In the year of adoption, the year ended December 31, 2003, additional compensation expense of \$66,681 and additional mineral exploration costs of \$1,231 were recorded.

For options issued prior to January 1, 2003, the Company had chosen to account for the employee stock-based compensation plans using the intrinsic-value method and as a result, no compensation cost is recorded on the grant of stock options to employees. Instead, consideration paid by employees on the exercise of stock options is recorded as share capital. Pro-forma net income and earnings per share have been provided as if the fair-value accounting method had been used for employee stock options since January 1, 2001 (see Note 8).

The fair value of stock options is estimated at the grant date using the Black-Scholes option pricing model. This model requires the input of a number of assumptions, including expected dividend yields, expected stock price volatility, expected time until exercise and risk-free interest rates. Although the assumptions used reflect management's best estimate, they involve inherent uncertainties based on market conditions generally outside the control of the Company. If future market conditions are different than the assumption used, stock-based compensation expense could be significantly different.

The contributed surplus balance is reduced as the options are exercised and the amount initially recorded in contributed surplus for the options, at the time of issue, is credited to share capital along with the proceeds received upon exercise.

**(l) Loss per share amounts**

Loss per share amounts are computed using the weighted-average number of common shares outstanding during the year. Diluted loss per share is calculated based on the treasury stock method, which assumes that any proceeds obtained on the exercise of options and warrants would be used to purchase common shares at the average trading price for the period.

**(m) Foreign currency translation**

Transaction amounts denominated in foreign currencies are translated into their Canadian dollar equivalents at exchange rates prevailing at the transaction dates. Carrying values of monetary assets and liabilities reflect the exchange rates at the balance sheet date. Translation gains and losses are included in current earnings.





**3. Property, plant and equipment**

	2004			2003		
	Cost	Accumulated Amortization	Net Book Value	Cost	Accumulated Amortization	Net Book Value
Equipment	312,522	205,485	107,037	270,454	185,179	85,275
Computer	279,553	220,233	59,320	256,390	200,491	55,899
Leasehold improvements	38,382	23,522	14,860	30,543	13,235	17,308
	<b>630,457</b>	<b>449,240</b>	<b>181,217</b>	<b>557,387</b>	<b>398,905</b>	<b>158,482</b>

**4. Mineral properties**

The Company holds a significant number of permits and leases on mineral rights in the Athabasca and Birch Mountains regions of Northern Alberta.

*Athabasca Region*

At December 31, 2004, the Company's mineral property in the Athabasca region consisted of 38 (2003 – 40) permits, which includes 15 permits in the process of being converted by the Company to leases and 65 (2003 – 30) leases for a total area of 335,190 (2003 – 279,351) hectares. The Company is party to Co-Development Agreements with Syncrude Canada Ltd., Suncor Energy Inc., Albion Sands Energy Inc. and Canadian Natural Resources Limited. The agreements provide for a co-operative planning in the development of the lands and data sharing by bringing together the holder of the oil sands rights and the holder of the metallic and industrial mineral rights.

In September 2003, the Company signed an agreement to sell a minimum of \$100,000 worth of limestone to Syncrude Canada Ltd. within Syncrude's Aurora mine.

*Birch Mountains Region*

At December 31, 2003, the Company's mineral property in the Birch Mountains region comprised 10 permits covering 92,160 hectares. These permits expired in 2004 and the Company no longer has any interests in this area.

Amounts capitalized and expensed related to mineral properties over the past two years are as follows:

	2004 Total Capitalized	2004 Capitalized	2003 Capitalized	2004 Expensed	2003 Expensed
Administration	79,383	73,910	5,473	34,276	65,797
Assay and geological	77,740	77,740	-	654	20,429
Land lease and permit	50,530	47,320	3,210	611,857	146,327
Materials, services and drilling	2,606,237	2,393,912	212,325	45,737	179,060
Salaries	584,255	479,089	105,166	66,708	315,925
Travel and accommodations	91,224	81,262	9,962	3,139	16,847
	<b>3,489,369</b>	<b>3,153,233</b>	<b>336,136</b>	<b>762,371</b>	<b>744,385</b>

**5. Accounts payable and accrued liabilities**

Included in accounts payable are trade payables and accrued liabilities related to regular business operations. During 2003, the Company cancelled an accrued payable in the amount of \$194,000 relating to the estimated costs of discontinuing the Indonesian operations in 1998.

**6. Other liabilities**

Included in deferred charges is an amount related to a customer prepayment for future product deliveries.



**7. Share capital**

**(a) *Authorized capital***

Unlimited number of common voting shares  
Unlimited number of preferred shares issuable in series  
Unlimited number of non-voting shares

**(b) *Common shares***

	<b>Number</b>	<b>Amount</b>
Balance December 31, 2002	36,886,399	25,186,910
Issued for cash		
Issued on exercise of options	215,000	65,500
Private placements	7,229,686	2,013,600
Flow-through shares	6,118,000	2,529,500
Tax benefits renounced on flow-through shares	-	(1,011,000)
Share issuance costs	-	(185,636)
Balance December 31, 2003	50,449,085	28,598,874
Issued for cash		
Issued on exercise of warrants	5,395,292	2,723,054
Issued on exercise of options	545,180	228,580
Private placements	3,891,013	2,865,038
Flow-through shares	6,026,229	3,744,344
Tax benefits renounced on flow-through shares	-	(1,363,000)
Share issuance costs	-	(546,382)
Elimination of deficit (note 10)	- -	(27,748,932)
<b>Balance December 31, 2004</b>	<b>66,306,799</b>	<b>8,501,576</b>

In December 2004, the Company completed a private placement of 732,263 units at \$1.50 per unit. Of these units 142,896 units were flow-through and the remaining 589,367 consisted of one common share and one common share warrant, entitling the holder to purchase one additional common share at a price of \$2.00 before December 31, 2005.

In July, August and December 2004, the Company completed a private placement in three tranches. A total of 9,184,979 units at \$0.60 per unit were issued. Of these units 5,883,333 units were flow-through and the remaining 3,301,646 consisted of one common share and one-half of one common share warrant, each whole share warrant entitling the purchase of one common share at a price of \$0.75 before December 31, 2005. The agent received 666,667 warrants, each warrant entitling the purchase of one common share at a price of \$0.75 before December 31, 2005.

At December 31, 2004, the Company had renounced all of its flow-through commitments remaining on shares issued in 2003 and renounced \$3,744,000 of expenditures for shares issued in 2004. The balance of \$2,525,000 of qualifying expenditures is to be incurred prior to December 31, 2005.

In December 2003, the Company completed a private placement of 4,000,000 flow-through units at a price of \$0.50 per unit.

In August, October and November 2003, the Company completed three additional private placements totalling 4,123,564 units at \$0.30 per unit. Each unit consisted of one common share plus one-half of one common share warrant entitling the holder to purchase an additional common share for \$0.50 for a period of 12 months after closing.

In May 2003, the Company completed a private placement of 4,758,410 units at \$0.25 per unit. Of these, 1,870,000 units were flow-through. All units consisted of one common share and common share warrant entitling the holder to purchase an additional common share for \$0.50 for a period of 16 months after closing.





**7. Share capital (continued)**

In January 2003, the Company completed a private placement of 465,712 units at \$0.25 per unit. Of these, 248,000 units were flow-through. All units consisted of one common share and one common share warrant entitling the holder to purchase an additional common share for \$0.50 for a period of 18 months after closing.

At December 31, 2003, the Company had renounced all of its flow-through commitment and incurred \$578,407 of expenditures. The balance of \$1,951,093 of qualifying expenditures were incurred prior to December 31, 2004.

During 2001, the Company entered into an agreement with AuRIC Precious Metals Inc. (AuRIC) to purchase rights to a customized fire assay protocol developed by AuRIC. The contract includes provisions for independent third-party verification tests using a double-blind chain-of-custody test protocol, the costs of which are to be borne by the Company. When the Company is satisfied that AuRIC has met all of the conditions of the agreement, the Company has agreed to purchase the assay protocol from AuRIC for consideration of US\$400,000 plus 640,000 common shares of the Company, 400,000 that will be free trading, and the issuance of which must comply with the applicable laws in Canada and the United States. Independent verification tests conducted to date are inconclusive and no compensation has been paid and no shares have been issued.

**(c) Preferred shares**

An unlimited number of preferred shares may be issued in one or more series, and the directors are authorized to fix the number of shares in each series and to determine the designation, rights, privileges and conditions attached to the shares of each series. No preferred shares have been issued.

**(d) Reserved for issue**

**Options**

The Company has two stock option plans. The original plan was established in 1994 to grant options to directors, officers, employees and consultants of the Company. The plan is administered by the Compensation Committee of the Board of Directors and contains provisions stating that the option period may not exceed five years and that the number of common shares issuable on exercise of outstanding stock options may not exceed 10% of the issued and outstanding common shares.

In March 2002, the Board of Directors approved a new stock option plan ("2002 Plan"), which was approved by the shareholders at the June 2002 annual general and special meeting. The purpose of the 2002 Plan is to offer persons who provided services to the Company, whether directors, officers, consultants or employees, an opportunity to obtain a proprietary interest in the Company through the purchase of common shares and to aid in attracting, retaining and encouraging the continued involvement of such persons with the Company. The number of common shares reserved for issuance pursuant to the exercise of all options under this plan may not exceed 3,735,211. The plan is administered by the Compensation Committee of the Board of Directors who determine to whom options shall be granted including the terms, pricing and vesting of the grants.



**7. Share capital (continued)**

The Company has granted options on common shares as follows:

	<b>Number of Options</b>	<b>Price Range (\$)</b>	<b>Weighted Average Price (\$)</b>	<b>Expiry Date</b>
December 31, 2001, outstanding	2,298,750	0.22 – 1.36	0.77	2003 – 2006
Granted	2,555,000	0.26 – 0.34	0.30	2007
Cancelled	(235,000)	0.70 – 1.36	0.98	2003
December 31, 2002, outstanding	4,618,750	0.22 – 1.36	0.53	2004- 2007
Granted	2,487,500	0.30 – 0.50	0.32	2004 – 2008
Cancelled	(500,000)	0.35 – 0.90	0.52	2004
Exercised	(215,000)	0.22 – 0.35	0.30	2004
December 31, 2003, outstanding	6,391,250	0.22 – 1.36	0.51	2004 – 2008
Granted	2,135,000	0.50 – 0.74	0.55	2009
Cancelled	(665,000)	1.36	1.36	2004
Exercised	(545,180)	0.26 – 0.55	0.40	2007-2008
<b>December 31, 2004, outstanding</b>	<b>7,316,070</b>	<b>0.26 – 0.74</b>	<b>0.45</b>	<b>2005 – 2009</b>

The following summarizes information about stock options outstanding and exercisable as at December 31, 2004:

<b>Number of Options</b>	<b>Expiry Date</b>	<b>Exercisable and Outstanding</b>	<b>Option Price (\$)</b>
408,750	January 2006	408,750	0.60
275,000	April 2006	275,000	0.65
200,000	May 2006	200,000	0.50
1,040,000	March 2007	1,040,000	0.26
1,365,000	April 2007	1,365,000	0.34
2,092,320	October 2008	1,569,240	0.30
125,000	May 2009	62,500	0.53
1,780,000	August 2009	445,000	0.55
30,000	November 2009	7,500	0.74
<b>7,316,070</b>	<b>2006 - 2009</b>	<b>5,372,990</b>	<b>0.37</b>





**7. Share capital (continued)**

**Warrants**

In relation to private placements, the Company has the following warrants outstanding:

	<b>Number of Warrants</b>	<b>Price Range (\$)</b>	<b>Weighted-Average Price (\$)</b>	<b>Expiry Date</b>
December 31, 2002, outstanding (re-priced)	3,239,277	0.50	0.50	2004
Issued	7,553,104	0.50	0.50	2004
December 31, 2003, outstanding	10,792,381	0.50	0.50	2004
Issued	2,906,857	0.75 – 2.00	0.97	2005
Expired	(5,418,758)	0.50	0.50	2004
Exercised	(5,395,292)	0.50 – 0.75	0.50	2004
<b>December 31, 2004, outstanding</b>	<b>2,885,188</b>	<b>0.75 – 2.00</b>	<b>0.97</b>	<b>2005</b>

During 2004, 5,395,292 warrants were exercised and a corresponding number of common shares were issued at a weighted average price of \$0.50 each for a total consideration of \$2,723,054.

During 2003, the Company extended the expiry date of warrants that were scheduled to expire in 2003 to 2004. All of the outstanding warrants as at December 31, 2002, were re-priced from a range of \$0.75 - \$1.00 per warrant to \$0.50 per warrant.

**8. Stock-based compensation**

The Company uses the fair-value method using the Black-Scholes option-pricing model to provide a value for stock based compensation for employees, directors, officers and advisors. Option pricing models require the input of highly subjective assumptions, including the expected price volatility. Change in the subjective input assumptions can materially affect the fair-value estimate, and therefore the existing models do not necessarily provide a reliable single measure of the fair value of the Company's stock options.

**(a) Employees, directors and officers**

In 2004, the total stock-based compensation for options issued to employees, directors and officers during the year was \$380,023 (2003 - \$266,723). The amount will be amortized over an 18-month period as the options vest. As a result the compensation expense recognized for the year was \$246,127 (2003 - \$66,681), which included the amortization of \$137,053 related to options issued in 2003, leaving an unamortized balance of \$337,629 (2003 - \$200,042).

Had the fair-value method been used since January 1, 2001, the Company's net earnings and net earnings per share would have been as follows:

	<b>2004</b>	<b>2003</b>	<b>2002</b>
Pro-forma loss	<b>(1,224,057)</b>	(557,435)	(2,079,950)
Loss per share, basic	<b>(0.02)</b>	(0.01)	(0.06)



**8. Stock-based compensation (continued)**

The fair value of each option was estimated on the date of grant using the Black-Scholes option-pricing model with the following weighted-average assumptions:

	2004	2003	2002
Expected life	1 to 2 years	3 years	5 years
Risk-free interest rate	3.8%	3.9%	4.5%
Expected volatility	65%	65%	35%
Annual dividends	nil	nil	nil

**(b) Advisors**

In 2004, the Company issued 200,000 options at an exercise price of \$0.50 to an investor relations advisory firm. The total stock-based compensation for these options was \$32,231. The amount will be amortized over the period as the options vest. The amount recognized as compensation expense in the current year is \$35,922, which has been reflected in professional fees and included the amortization of \$3,691 related to options issued in 2003, leaving an amortized balance of \$nil.

In 2003, the total stock-based compensation was \$26,967. The amount was amortized over a 16-month period, which was the vesting period of the options. Of the total amount, \$22,045 has been reflected as share issuance costs and \$1,231 as mineral exploration costs, with the offsetting credits to contributed surplus and leaving an unamortized balance of \$3,691.

The fair value of each option was estimated on the date of grant using the Black-Scholes option-pricing model with the following weighted-average assumptions:

	2004	2003
Expected life	1 year	2 years
Risk-free interest rate range	3.8%	3.8%
Expected volatility	65%	65%
Annual dividends	nil	nil

**9. Contributed surplus**

Changes in contributed surplus are as follows:

Balance, December 31, 2002	-
Options granted to employees, directors and officers	66,681
Options granted to advisors	23,276
Balance, December 31, 2003	89,957
Options granted to employees, directors and officers	246,127
Options granted to advisors	35,922
Options converted to share capital	(33,437)
<b>Balance December 31, 2004</b>	<b>338,569</b>

**10. Deficit**

Pursuant to Section 38 of the Business Corporations Act of Alberta, the shareholders approved a reduction in the stated capital by the amount of the accumulated deficit as of June 30, 2004. As a result, the deficit and share capital were reduced by \$27,748,932.





## 11. Commitments

The Company has land lease agreements on exploration properties and rents premises and equipment under operating leases. Commitments under these agreements require the following payments over the next five years:

	Land Lease	Other	Total
2005	451,947	306,460	758,407
2006	451,947	267,135	719,082
2007	451,555	103,335	554,890
2008	451,555	29,943	481,498
2009	444,586	-	444,586
	<b>2,251,590</b>	<b>706,873</b>	<b>2,958,463</b>

Not included in the above amounts is a contingent royalty commitment on one land lease to pay \$.015 per tonne of limestone sold, should limestone be produced from minerals on that specific lease

## 12. Related-party transactions

The Company incurs transactions with related parties, in the normal course of business. The transactions are measured at the exchange amount, which is the consideration established and agreed to by the related party and were as follows:

- Included in shareholder services and promotion is \$14,656 (2003 - \$1,469; 2002 - \$9,888) paid to a company controlled by the spouse of a director.
- Included in professional fees is \$37,159 (2003 - \$26,327; 2002 - 46,614) of consulting and legal fees paid to a company owned by an officer.
- Included in professional fees is \$99,145 (2003 - \$77,254, 2002 - \$61,664) of legal fees paid to firms in which officers are partners.
- Included in accounts payable is \$7,945 (2003 - \$24,953; 2002 - \$68,763) relating to these transactions.

## 13. Income taxes

The income tax recovery differs from the amount that is expected by applying the current tax rates for the following reasons:

	2004	2003	2002
Loss before taxes	2,587,057	1,568,435	1,896,250
Expected tax recovery at 38.95% (2003 - 40.80%; 2002 - 41.00%)	1,007,659	639,921	777,462
Resource allowance	(138,585)	(205,591)	(55,971)
Share issue costs	17,342	20,989	8,749
Non-deductible expenses for tax and other	(120,779)	(36,613)	(3,587)
Other permanent differences	163,469	(788,224)	-
Valuation allowance	433,894	1,380,518	(640,353)
Future income tax recovery	1,363,000	1,011,000	86,300

Future income tax assets consist of the following temporary differences:

	2004	2003	2002
Mineral exploration costs	4,372,540	4,984,788	5,838,957
Capital assets	69,911	90,770	101,291
Scientific Research and Experimental Development expenditures unclaimed	77,702	79,438	86,806
Non-capital loss carry forwards	537,675	436,552	987,185
Share issuance costs and other	154,518	54,692	12,519
Valuation allowance	(5,212,346)	(5,646,240)	(7,026,758)
Future tax assets (net of valuation allowance)	-	-	-



### 13. Income taxes (continued)

At December 31, 2004, the Company has the following deductions available:

- Canadian mining exploration costs and undepreciated capital cost allowance of \$18,309,000 (2003 - \$16,054,000, 2002 - \$14,600,000), which may be carried forward indefinitely;
- Scientific Research and Experimental Development costs of \$211,000, which may be carried forward indefinitely; and
- Non-capital loss carry forwards of approximately \$1,359,000 that, if unused, will expire as follows:

2005	132,000
2006	185,000
2007	-
2008	719,000
2009	20,000
2010	-
2011	303,000

In addition to the above, the Company has the following tax deductions available, which have not been reflected in the statements:

- Capital losses of \$3,500,000, which may be carried forward indefinitely; and
- Investment tax credits of \$38,000 available for carry forward to 2005.

### 14. Per share amounts

Basic loss per share is calculated using the weighted-average number of shares outstanding for the year. For purposes of the calculations, the weighted-average number of shares outstanding was 56,596,951 (2003 - 41,147,226, 2002 - 34,323,673). Diluted loss per share amounts have not been calculated as the effect of common shares issuable upon exercise of share options and warrants is anti-dilutive.

### 15. Segmented information

The Company's principal business segment is the acquisition and exploration of mineral leases and permits. The Company also engages in research of mineral technology and in 2003 established an Industrial Mineral Division to pursue the development of its limestone property. The Company's activities are focused in Western Canada.

	Mineral Exploration	Mineral Technology	Industrial Minerals	Corporate	Total
<b>2004</b>					
Revenue	-	-	-	48,190	<b>48,190</b>
Expense	762,371	-	-	1,872,876	<b>2,635,247</b>
Loss	(762,371)	-	-	(1,824,686)	<b>(2,587,057)</b>
Assets	59,393	-	3,585,938	5,887,092	<b>9,532,423</b>
<b>2003</b>					
Revenue	-	-	100,000	211,973	311,973
Expense	262,044	11,150	471,191	1,136,023	1,880,408
Loss	(262,044)	(11,150)	(371,191)	(924,050)	(1,568,435)
Assets	39,510	-	364,892	2,019,831	2,424,233
<b>2002</b>					
Revenue	-	-	250,000	986	250,986
Expense	821,331	42,514	112,460	1,170,931	2,147,236
Loss	(821,331)	(42,514)	137,540	(1,169,945)	(1,896,250)
Assets	81,600	-	-	183,492	265,092





## 16. Financial instruments

The Company, as part of its operations, carries a number of financial instruments. It is management's opinion that the Company is not exposed to significant interest, currency or credit risks arising from these financial instruments except as otherwise disclosed.

### *Fair values*

The carrying amount of cash and cash equivalents, amounts receivable and amounts payable approximates their fair value because of the short-term maturities of these items.

### *Foreign currency risk*

The Company maintains cash balances and enters into transactions to purchase goods and services denominated in United States currency for which the related expenses and accounts payable balances are subject to exchange rate fluctuations. The transactions and balances have been stated in Canadian dollars in accordance with the Company's foreign currency translation policy (Note 2). As at year-end, the following items were denominated in United States currency and have been converted into Canadian currency at the year-end exchange rate.

	2004	2003
Cash (CAD\$)	387,182	29,966
Accounts payable (CAD\$)	20,376	1,382

## 17. Material differences between Canadian and United States generally accepted accounting principles

The consolidated financial statements of the Company have been prepared in accordance with generally accepted accounting principals (GAAP) in Canada. Significant differences between GAAP in Canada and the United States that would have an effect on these consolidated financial statements are as follows:

- (a) The balance of any unspent funds raised under a flow-through arrangement is considered restricted cash under U.S. GAAP and would require separate disclosure on the balance sheet. In addition, such restricted amounts would not be considered cash and cash equivalents for cash flow reporting purposes. The amount of such restricted cash applicable to future flow-through expenditures included in the balance sheet was \$2,525,000 (2003 – \$1,951,093, 2002 – \$134,866).
- (b) Mineral properties are accounted for in accordance with Canadian GAAP as discussed in Note 2. For U.S. GAAP purposes, exploration costs relating to unproven mineral leases and permits as well as acquisition costs for leases and permits that do not provide for unrestricted exploration, are expensed as incurred. The Company tracks expenditures on its mineral properties as exploration or development and under U.S. GAAP capitalizes costs relating to the development of proven reserves. Capitalized exploration costs are then assessed to determine if a writedown in the carrying value is necessary and any writedown would be considered an operating expense and included in the determination of operating loss for the period in which the writedown occurred.

In 2002, the Company's treatment of mineral exploration costs as an expense is similar to the treatment under U.S. GAAP, resulting in no difference for 2002. For 2003, expenditures capitalized under Canadian GAAP would be expensed as operating costs under U.S. GAAP, increasing the loss for 2003.

For 2004, U.S. GAAP would allow for the capitalization of development costs including land costs, pit planning, road design and costs of obtaining government approvals for expenditures related to proven mineral reserves, which were reported in an independent technical report. The expenditures that are of an exploration nature, relate to unproven reserves, or cannot be directly linked to development, total \$1,189,563, would be expensed under U.S. GAAP, increasing the loss for 2004.

For U.S. GAAP cash flow statement purposes, mineral exploration costs would be shown under operating activities rather than under investing activities.

- (c) Future income taxes, related to flow-through shares for renunciation of qualified resource expenditures, are treated as a cost of issuing those securities for Canadian GAAP. For U.S. GAAP, these costs are included in the future tax provision.



**17. Material differences between Canadian and United States generally accepted accounting principles (continued)**

If these consolidated financial statements were prepared in accordance with U.S. GAAP, the impact on shareholder's equity would be as follows:

	2004	2003
Shareholders' equity	8,951,636	2,275,447
Exploration expenditures capitalized (b)	(1,525,699)	(336,136)
Shareholders' equity under U.S. GAAP	7,425,937	1,939,311

In addition, the impact on the consolidated statements of loss would be as follows:

	2004	2003	2002
Net loss for the year under Canadian GAAP	1,224,057	557,435	1,809,950
Exploration expenditures capitalized (b)	1,189,563	336,136	-
Future income taxes included in share capital (c)	1,363,000	1,011,000	86,300
Net loss for the year under U.S. GAAP	3,776,620	1,904,571	1,896,250
Loss per share under U.S. GAAP			
Basic and fully diluted	(0.07)	(0.05)	(0.06)

Commencing Jan 1, 2003, the Company adopted the fair value method of accounting for stock options for both Canadian and U.S. GAAP purposes. The effect of this change was that stock-based compensation is recorded as an expense instead of disclosing the effect of granting options as proforma information in the notes to the financial statements.

For the years ended December 31, 2004 and 2003, these costs were calculated in accordance with the Black-Scholes option-pricing model assuming no dividends are paid, an annual risk-free interest rate of 3.8% to 3.9%, an expected volatility of 65% and an expected life of one to three years. For 2004, the fair value of the options, calculated as \$278,357 (2003 - \$66,681), is included in the net loss. Prior to Jan 1, 2003, the Company accounted for stock options in accordance with APB Opinion No.25, *Accounting for Stock Issued to Employees* (APB 25). Under APB 25, stock-based compensation to employees and directors is calculated using the intrinsic-value method whereby compensation cost is recorded for the excess, if any, of the quoted market price versus the exercise price at the date granted.

Had the Company adopted the fair value method for its U.S. GAAP disclosure prior to Jan 1, 2003, the following net losses would have been reported.

	2004	2003	2002
Net loss for the year under U.S. GAAP	2,587,057	1,904,571	1,896,250
Pro-forma stock compensation	-	-	270,000
Pro-forma loss for the year under U.S. GAAP	2,587,057	1,904,571	2,166,250
Loss per share under U.S. GAAP			
Basic and diluted	(0.05)	(0.05)	(0.06)





**18. Subsequent events**

Subsequent to December 31, 2004, the Company issued a total of 600,000 stock options to an employee and a consultant at an exercise price of \$2.35, as well as 1,290,000 options with 1,100,000 options to directors and officers with an exercise price of \$2.48.

**19. Comparative figures**

Certain comparative figures have been reclassified to confirm with presentation adopted in the current year.

